

Docket No. 1385.45508X00
Serial No.10/662,640
Office Action dated August 30, 2007

REMARKS

I. Introduction

By the present Amendment, claim 1 has been amended, and claim 16 canceled. Accordingly, claims 1-3, 5-7, 11-14, and 17-19 remain pending in the application.

II. Office Action Summary

In the Office Action of August 30, 2006, claims 1-3, 5-7, 11-14, and 16-19 were rejected under 35 USC §112, first paragraph, for failing to comply with the enablement requirement. Claims 1-3, 5-7, and 19 were rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 5,532,128 issued to Eggers. Claims 1-3, 5-7, 11, and 13 were rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,906,828 issued to Cima in view of Falsey and Greco. Claims 12-14, 17, and 18 were rejected under 35 USC §103(a) as being unpatentable over Cima in view of Falsey and Greco, and further in view of Chou. Claim 16 was rejected under 35 USC §103(a) as being unpatentable over Eggers in view of A Field Guide to Experimental Design ("Field Guide"). Claims 1-3, 5, 7, and 15-18 were provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over various co-pending claims of application no. 10/662,713 ("App. '713"). These rejections are respectfully traversed.

III. Rejections under 35 USC §112

Claims 1-3, 5-7, 11-14, and 16-19 were rejected under 35 USC §112, first paragraph, for failing to comply with the enablement requirement. Specifically, the

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Office Action alleges that the Specification does not reasonably provide enablement for identifying a single agent.

Applicants respectfully disagree with the allegations made in the Office Action. At the outset, Applicants note that the Specification is in fact enabling, and provides ample description to enable a skilled artisan to practice the claimed invention. In the interest of advancing prosecution, however, Applicants have amended independent claim 1 to specifically recite that mixtures of single agents are identified. Since the Office Action admits that the Disclosure is enabling for identifying mixtures of agents, the present amendment of independent claim 1 is believed to overcome the rejection under 35 USC §112, first paragraph.

IV. Rejections under 35 USC §102

Claims 1-3, 5-7, and 19 were rejected under 35 USC §102(b) as being anticipated by Eggers. Regarding this rejection, the Office Action alleges that Eggers discloses all of the features recited in the instant claims.

As amended, independent claim 1 defines a high throughput method for identifying agents capable of producing a desired biological response in whole cells.

The method comprises:

- (a) providing receptacles having a culture surface;
- (b) placing different mixtures comprising single said agents into selective ones of said receptacles according to a statistical design, wherein said statistical design is a space-filling design based on a coverage criteria, a lattice design, or a latin square design;
- (c) immobilizing said mixtures of single agents to said culture surface;
- (d) contacting said agents from (c) with said whole cells;

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(e) acquiring data indicative of said desired biological response in said contacted cells; and

(f) identifying which of said mixtures of single agents are effective in producing said desired biological response in said contacted cells using statistical modeling of said acquired data.

According to independent claim 1, receptacles having a culture surface are provided. Different mixtures comprising single agents are placed into different receptacles according to a statistical design. In particular, the statistical design is either a space-filling design based on a coverage criteria, a lattice design or a Latin square design. The mixtures of single agents are immobilized to the cell culture surface. Next, agents from the step of immobilizing are contacted with whole cells. Data indicative of a desired biological response in the contacted cells is acquired. Next, an identification is made of which mixtures of single agents are effective in producing the desired biological response in the contacted cells using the statistical modeling of the acquired data.

Regarding the limitation of the specific statistical design being used, the Office Action admits that Eggers fails to specifically teach a Latin square design. However, the Field Guide is relied upon for teaching Latin square design to control the variation in an experiment that is related to rows and columns. The Office Action concludes that it would have been obvious to combine the teachings of Eggers with the Field Guide in order to arrive at the claimed invention. This does not appear to be the case.

As admitted in the Office Action, Eggers fails to disclose features recited in independent claim 1. However, there is simply no motivation to combine the teachings of Eggers to arrive at the claimed invention. Specifically, the references

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are in entirely different fields of endeavor. Furthermore, Eggers does not appear to be concerned with statistical designs. Therefore, no motivation would exist for Eggers to further seek out the teachings of a secondary reference in order to improve his results, thereby arriving at the claimed invention.

It is therefore respectfully submitted that, as amended, independent claim 1 is allowable over the art of record.

Claims 2, 3, 5-7, 11-14, and 17-19 depend from independent claim 1, and are therefore believed allowable for at least the reasons set forth above with respect to independent claim 1. In addition, these claims each introduce novel elements that independently render them patentable over the art of record.

V. Double Patenting Rejections

Claims 1-3, 5, 7, and 15-18 were provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 7 and 8 of co-pending App. '713.

Regarding this rejection, Applicants note that none of the claims of the instant application or co-pending App. '713 have actually been patented. Applicants therefore prefer to wait until the claims of either the instant application or the co-pending '713 application have in fact been patented in order to formulate a complete and appropriate response to this rejection.

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VI. Conclusion

For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a Notice of Allowance is believed in order, and courteously solicited.

If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

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AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 1385.45508X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP.



Leonid D. Theodor
Registration No. 39,397

LDT/vvr
1300 N. Seventeenth Street
Suite 1800
Arlington, Virginia 22209
Tel: 703-312-6600
Fax: 703-312-6666

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